DRAFT-3rd Harmonic Monday Meeting Minutes-DRAFT

Date: June 19, 2006
Time: 9 A.M.
Place: ICB Trailer 157 Conference Room

Attendees (P=Present):

C. Antoine	P	C. Cooper	P	T. Khabiboulline	P	N. Solyak	P
T. Arkan	P	H. Edwards		D. Mitchell	P		
L. Bellantoni	P	M. Foley	P	D. Olis	P		
C. Boffo		C. Ginsburg		P. Pfund	P		
H. Carter	P	E. Harms	P	A. Rowe	P		

Minutes recorded by Dan and Elvin
Minutes are posted at: http://tdserver1.fnal.gov/dolis/39GHz_minutes.html

Minutes of the meeting

Special session held in Hermitage meeting room, video-conferencing with personnel at DESY, to discuss test results on cavity-2 (local heating of the HOM body at coupler end of cavity). Collaborators present at DESY included: H. Edwards, W-D Moeller, Dieter Proch, and Jacek Sekutowicz.

Dieter related his observations from a recent visit to SNS: erratic signals, burned attenuators, reconditioning input couplers by thermal cycling. He will make a CD ROM available via Helen or other means.

Timer re-presented data from cavity-2 measurement in vertical test as well as multipacting simulations. General discussion of measurements, possible causes, possible remedies, and further testing followed. Further testing plan: for next test

- improve thermometry by moving sensors to HOM bodies
- reduce measurement noise for fast (10 kHz) readbacks
- relocate optical mirror to point directly at lower HOM body fix to - look for gas bubbles in LHe near HOM body
- excite cavity with 1msec pulses at gradients where multipacting isn't predicted by simulation to see if results change
- Timergali has already adjusted the lower HOM coupler top hat by 0.2 – 0.3 mm

Following this test the cavity will be opened up to

- add electron probes at coupler locations
- reverse cavity orientation to see heating at effected HOM body it follows it when rotated or rather depends on position in test stand.

There was also discussion about multipacting and means to limit it. Mike F is investigating how to trim the Formteil via the main input coupler opening. Another option presented is a magnet with iron shielding. More detail needed here.